

FIG.1

CONTROL DATA

USER DATA

- 110 CONTROL CH TRANSMISSION SECTION
- 5 120 USER CH TRANSMISSION SECTION
- 250 FB INFORMATION RECEPTION SECTION
- 130 MULTIPLEXING SECTION
- 140 S/P CONVERSION SECTION
- 150 IFFT SECTION
- 10 160 GI INSERTION SECTION
- 170 RADIO TRANSMISSION SECTION
- 270 FBSC DETERMINING SECTION
- 260 PL SIGNAL RECEPTION SECTION
- 240 P/S CONVERSION SECTION
- 15 230 FFT SECTION
- 220 GI ELIMINATION SECTION
- 210 RADIO RECEPTION SECTION

FIG.2

- 20 CONTROL DATA
- 111 CODING SECTION
- 112 MODULATION SECTION
- TO MULTIPLEXING SECTION
- 130 USER DATA
- 25 120 USER CH TRANSMISSION SECTION
- TO MULTIPLEXING SECTION 130
- 250 FB INFORMATION RECEPTION SECTION

FROM FFT SECTION 230

270 FBSC DETERMINING SECTION

262 RECEPTION QUALITY MEASURING SECTION

261 PL SIGNAL EXTRACTION SECTION

5 FROM P/S CONVERSION SECTION 240

FIG.3

CONTROL DATA

110 CONTROL CH TRANSMISSION SECTION

10 TO MULTIPLEXING SECTION 130

USER DATA

121 CODING SECTION

122 RETRANSMISSION CONTROL SECTION

123 MODULATION SECTION

15 TO MULTIPLEXING SECTION 130

124 MCS DETERMINING SECTION

253 DECODING SECTION

252 DEMODULATION SECTION

251 FB INFORMATION EXTRACTION SECTION

20 FROM FFT SECTION 230

270 FBSC DETERMINING SECTION

260 PL SIGNAL RECEPTION SECTION

FROM P/S CONVERSION SECTION 240

25 FIG.4

310 RADIO RECEPTION SECTION

320 GI ELIMINATION SECTION

330 FFT SECTION
340 P/S CONVERSION SECTION
350 CONTROL CH RECEPTION SECTION
360 USER CH RECEPTION SECTION
5 370 PL SIGNAL RECEPTION SECTION CONTROL DATA USER DATA
470 RADIO TRANSMISSION SECTION
460 GI INSERTION SECTION
450 IFFT SECTION
440 S/P CONVERSION SECTION
10 430 SC ASSIGNMENT SECTION
420 MULTIPLEXING SECTION
410 FB INFORMATION TRANSMISSION SECTION

FIG.5

15 351 CONTROL INFORMATION EXTRACTION SECTION
352 DEMODULATION SECTION
353 DECODING SECTION
CONTROL DATA
FROM P/S CONVERSION SECTION 340
20 361 USER INFORMATION EXTRACTION SECTION
362 DEMODULATION SECTION
363 DECODING SECTION
364 ERROR DETECTION SECTION USER DATA
371 PL SIGNAL EXTRACTION SECTION
25 372 RECEPTION QUALITY MEASURING SECTION
430 SC ASSIGNMENT SECTION 420 MULTIPLEXING SECTION
415 MODULATION SECTION

413 CODING SECTION 411 CQI GENERATION SECTION
416 MODULATION SECTION
414 CODING SECTION
412 ACK/NACK GENERATION SECTION

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FIG.6 FREQUENCY SELECTIVE FADING
FREQUENCY

FIG.7

10 BASE STATION APPARATUS
MOBILE STATION APPARATUS
CONTROL DATA
USER DATA
FBSC INFORMATION FEEDBACK INFORMATION

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FIG.8
CONTROL DATA 1
CONTROL DATA 2
USER DATA 1

20 USER DATA 2

110 CONTROL CH TRANSMISSION SECTION
120 USER CH TRANSMISSION SECTION
130 MULTIPLEXING SECTION
140 S/P CONVERSION SECTION

25 150 IFFT SECTION

160 GI INSERTION SECTION
170 RADIO TRANSMISSION SECTION

500 DATA AMOUNT MEASURING SECTION

270a FBSC DETERMINING SECTION

250 FB INFORMATION RECEPTION SECTION

260 PL SIGNAL RECEPTION SECTION

5 240 P/S CONVERSION SECTION

230 FFT SECTION

220 GI ELIMINATION SECTION

210 RADIO RECEPTION SECTION

10 FIG.9

START

ST1000 RANK N MOBILE STATION APPARATUSES ACCORDING TO
AMOUNT OF DATA

ST1300 SEARCH jTH BEST SUBCARRIER OF MOBILE STATION

15 APPARATUS i

ST1400 ALREADY ASSINGED TO OTHER MOBILE STATION
APPARATUS

ST1500 ASSIGN SUBCARRIER TO MOBILE STATION APPARATUS
END

20

FIG.10

CONTROL DATA #1

CONTROL DATA #2

USER DATA #1

25 USER DATA #2

110 CONTROL CH TRANSMISSION SECTION

120 USER CH TRANSMISSION SECTION

	130	MULTIPLEXING SECTION
	140	S/P CONVERSION SECTION
	150	IFFT SECTION
	160	GI INSERTION SECTION
5	170	RADIO TRANSMISSION SECTION
	600	TRANSMIT POWER INFORMATION GENERAITON SECTION
	500	DATA AMOUNT MEASURING SECTION
	270a	FBSC DETERMINING SECTION
	250	FB INFORMATION RECEPTION SECTION
10	260	PL SIGNAL RECEPTION SECTION
	240	P/S CONVERSION SECTION
	230	FFT SECTION
	220	GI ELIMINATION SECTION
	210	RADIO RECEPTION SECTION
15		
		FIG.11
	310	RADIO RECEPTION SECTION
	320	GI ELIMINATION SECTION
	330	FFT SECTION
20	340	P/S CONVERSION SECTION
	350	CONTROL CH RECEPTION SECTION
	360	USER CH RECEPTION SECTION
	370	PL SIGNAL RECEPTION SECTION CONTROL DATA USER DATA
	470	RADIO TRANSMISSION SECTION
25	460	GI INSERTION SECTION
	450	IFFT SECTION
	440	S/P CONVERSION SECTION

700 TRANSMIT POWER SETTING SECTION

430 SC ASSIGNMENT SECTION

420 MULTIPLEXING SECTION

410 FB INFORMATION TRANSMISSION SECTION

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FIG.12

CONTROL DATA

USER DATA

110 CONTROL CH TRANSMISSION SECTION

10 120 USER CH TRANSMISSION SECTION

130 MULTIPLEXING SECTION

140 S/P CONVERSION SECTION

150 IFFT SECTION

160 GI INSERTION SECTION

15 170 RADIO TRANSMISSION SECTION

250 FB INFORMATION RECEPTION SECTION

810 SC DECISION SECTION

800 DESPREADING SECTION

230 FFT SECTION

20 220 GI ELIMINATION SECTION

210 RADIO RECEPTION SECTION

FIG.13

310 RADIO RECEPTION SECTION

25 320 GI ELIMINATION SECTION

330 FFT SECTION

340 P/S CONVERSION SECTION

350 CONTROL CH RECEPTION SECTION

360 USER CH RECEPTION SECTION

370 PL SIGNAL RECEPTION SECTION

CONTROL DATA

5 USER DATA

470 RADIO TRANSMISSION SECTION

460 GI INSERTION SECTION

450 IFFT SECTION

910 SPREADING SECTION

10 440 S/P CONVERSION SECTION

430a SC ASSIGNMENT SECTION

420 MULTIPLEXING SECTION

410 FB INFORMATION TRANSMISSION SECTION

900 FBSC SELECTION SECTION

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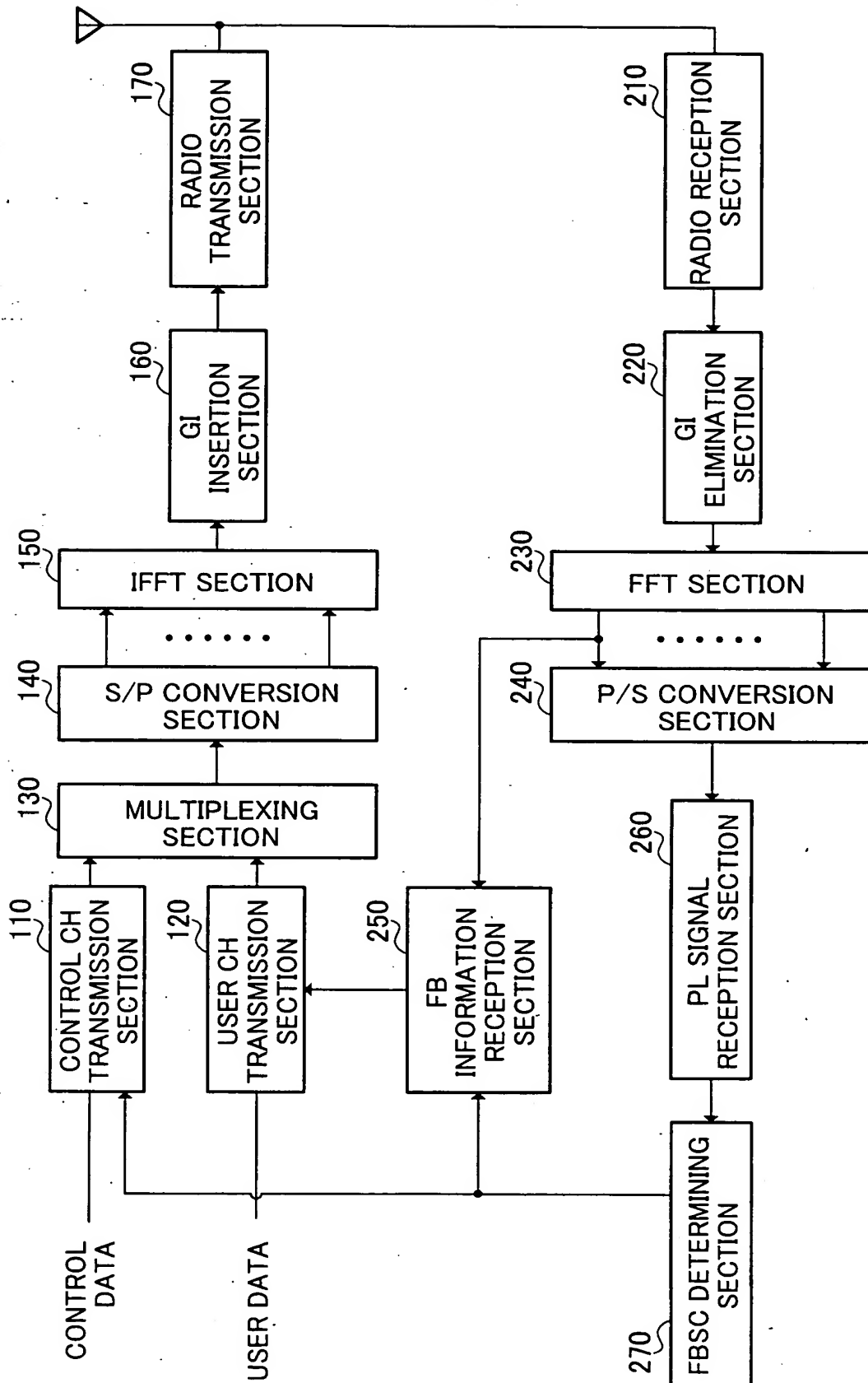


FIG. 1

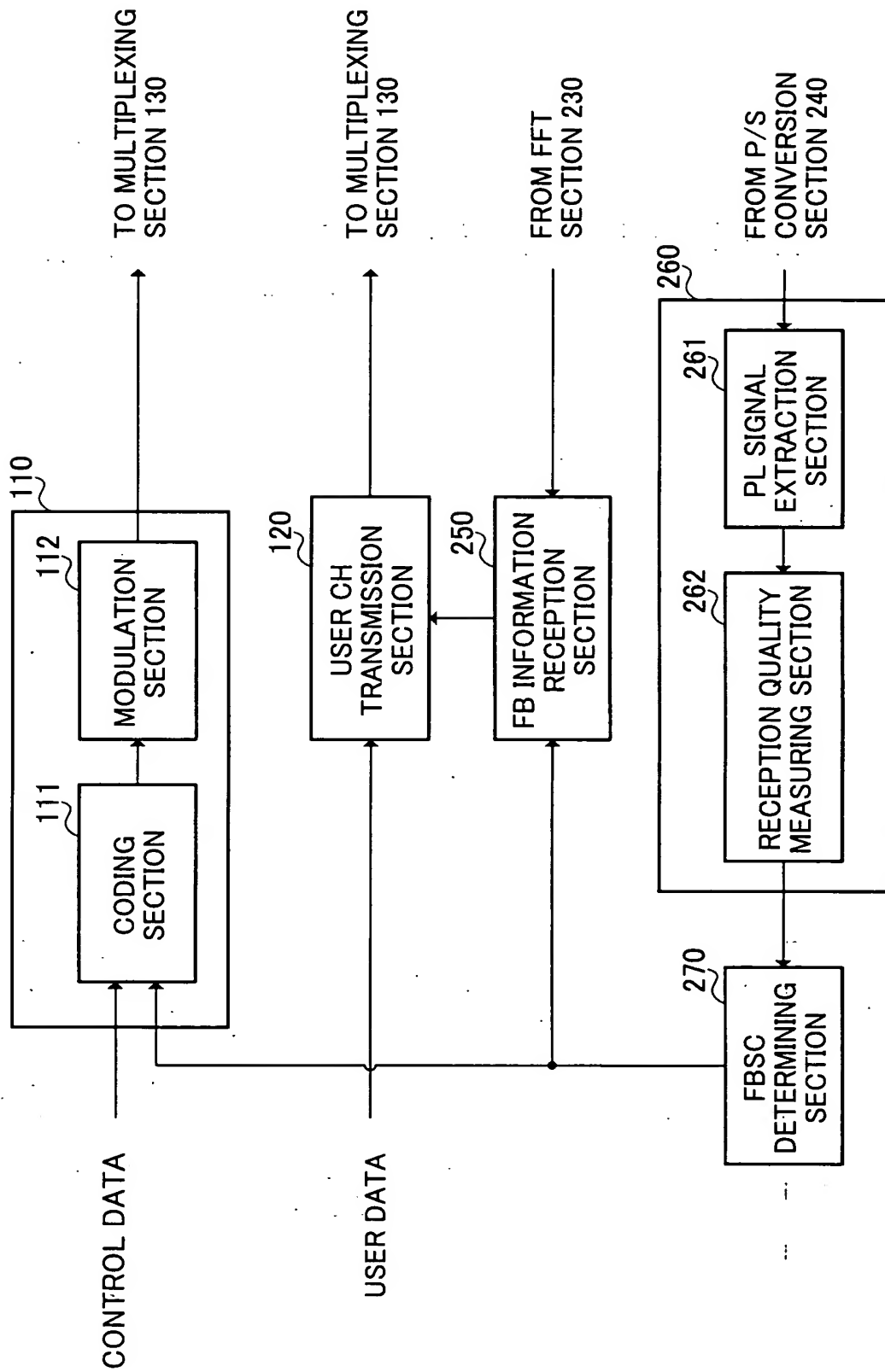


FIG.2

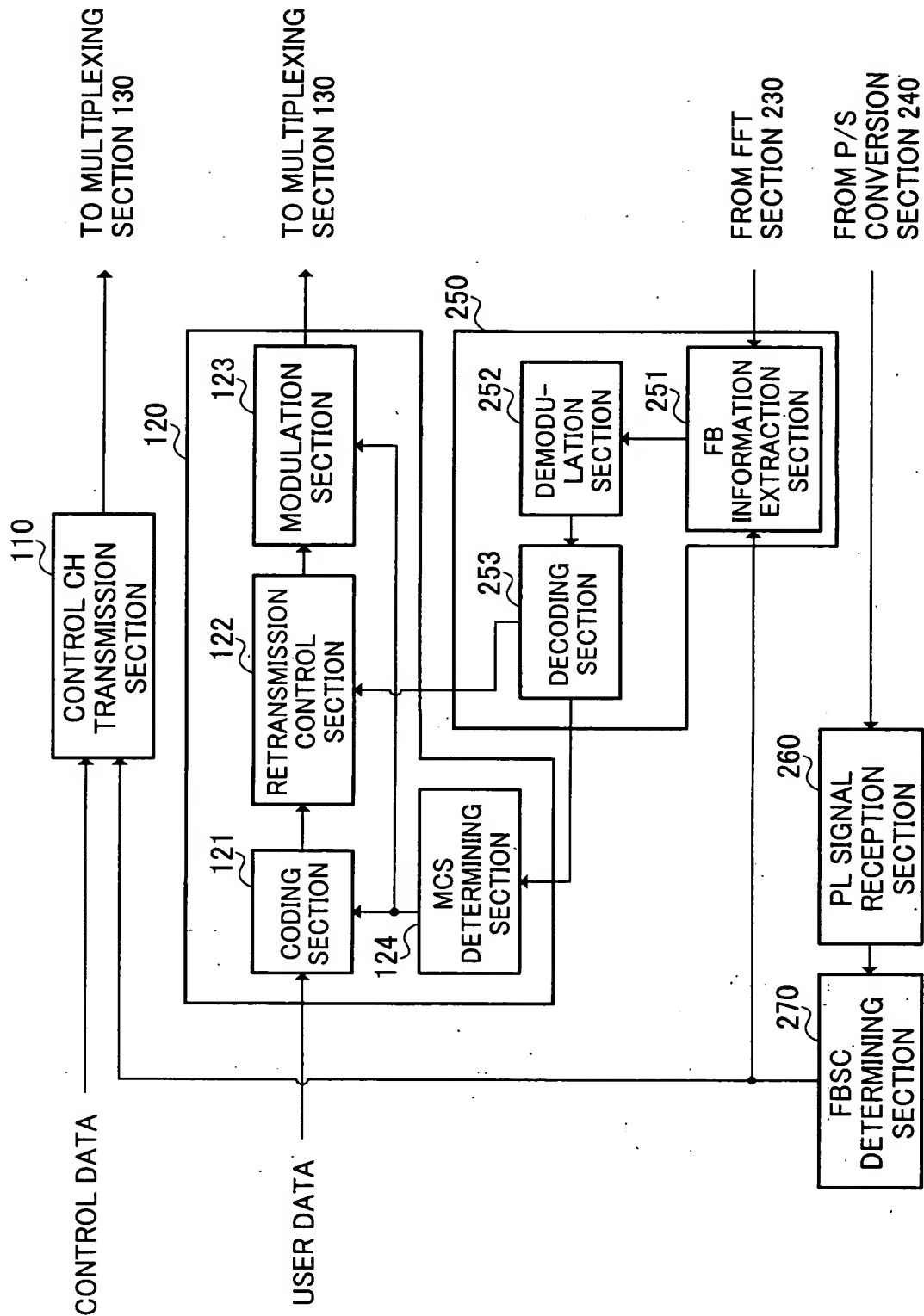


FIG. 3

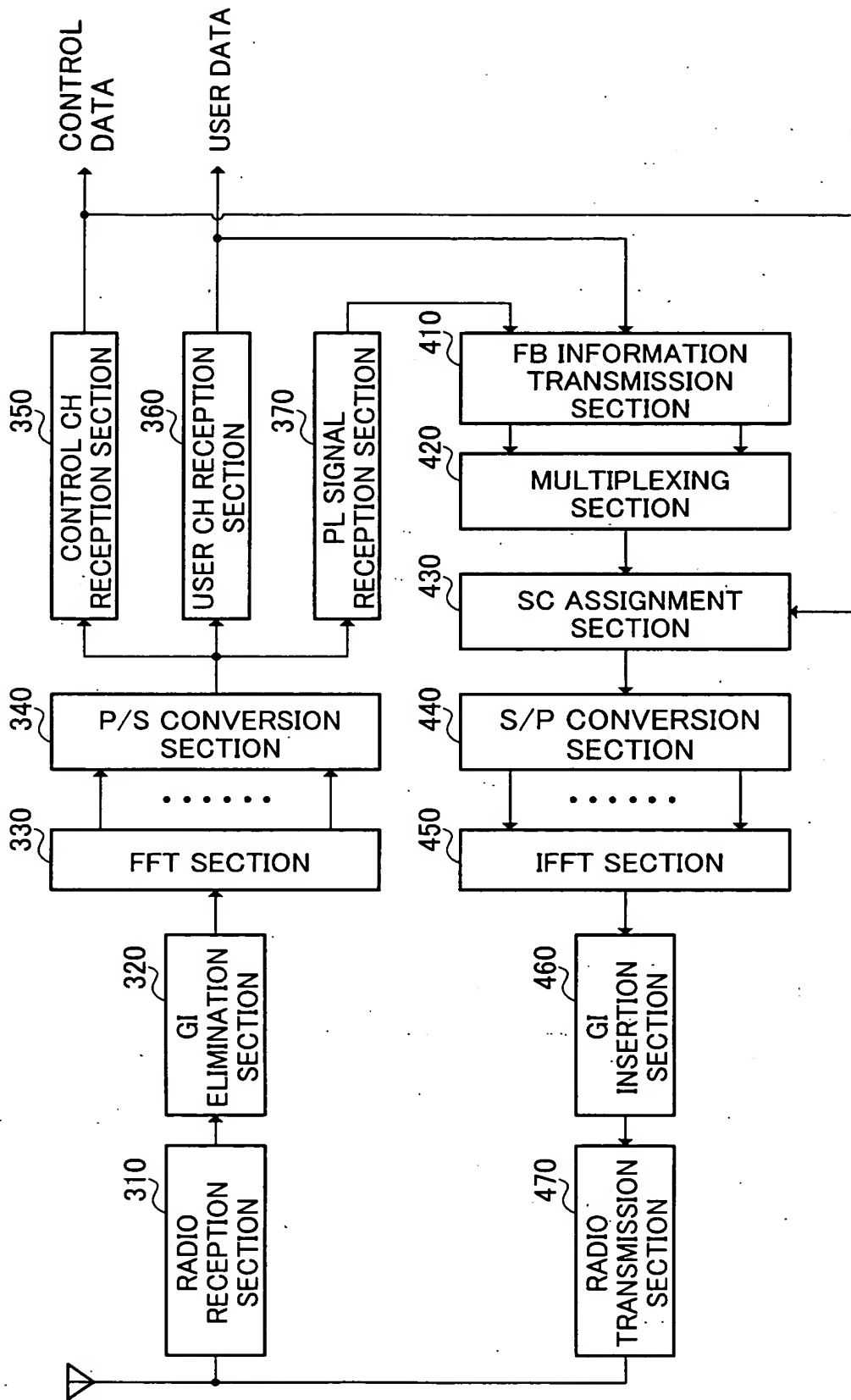


FIG.4

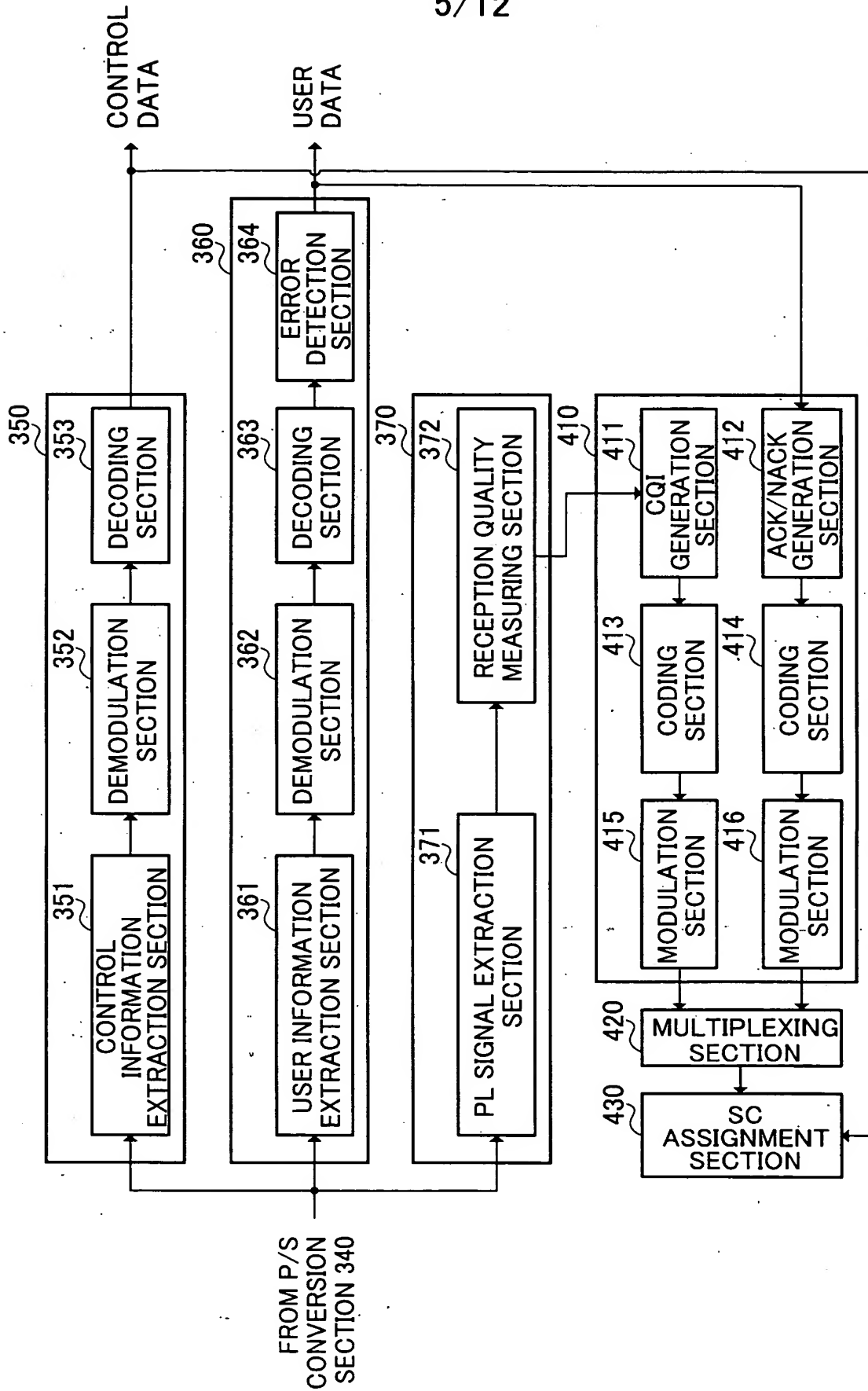


FIG. 5

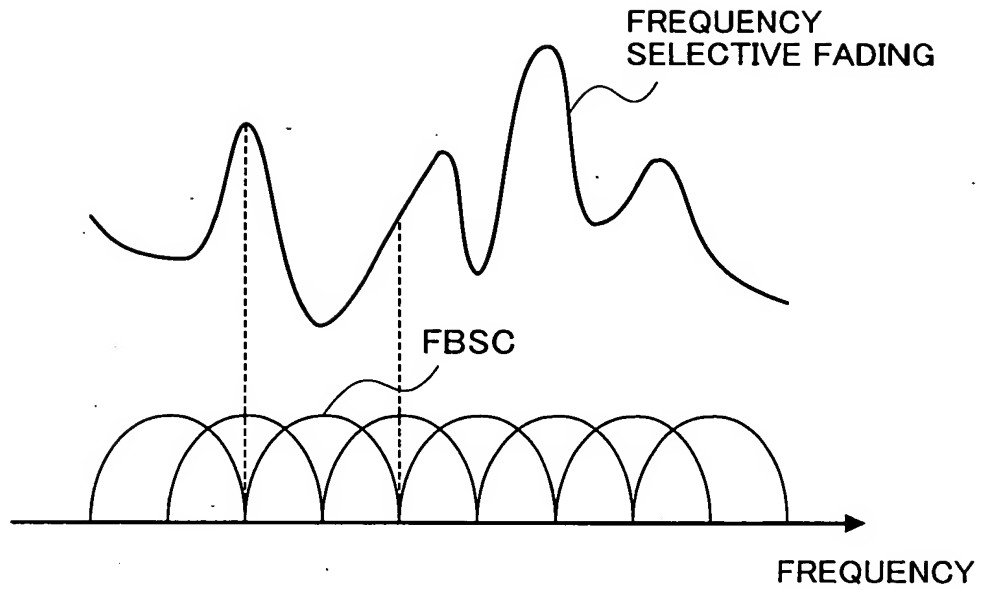


FIG.6

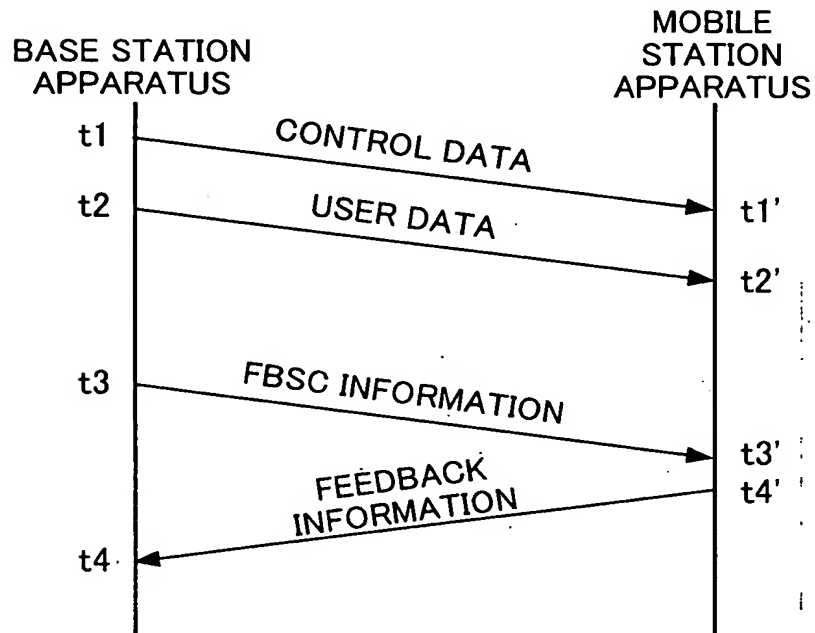


FIG.7

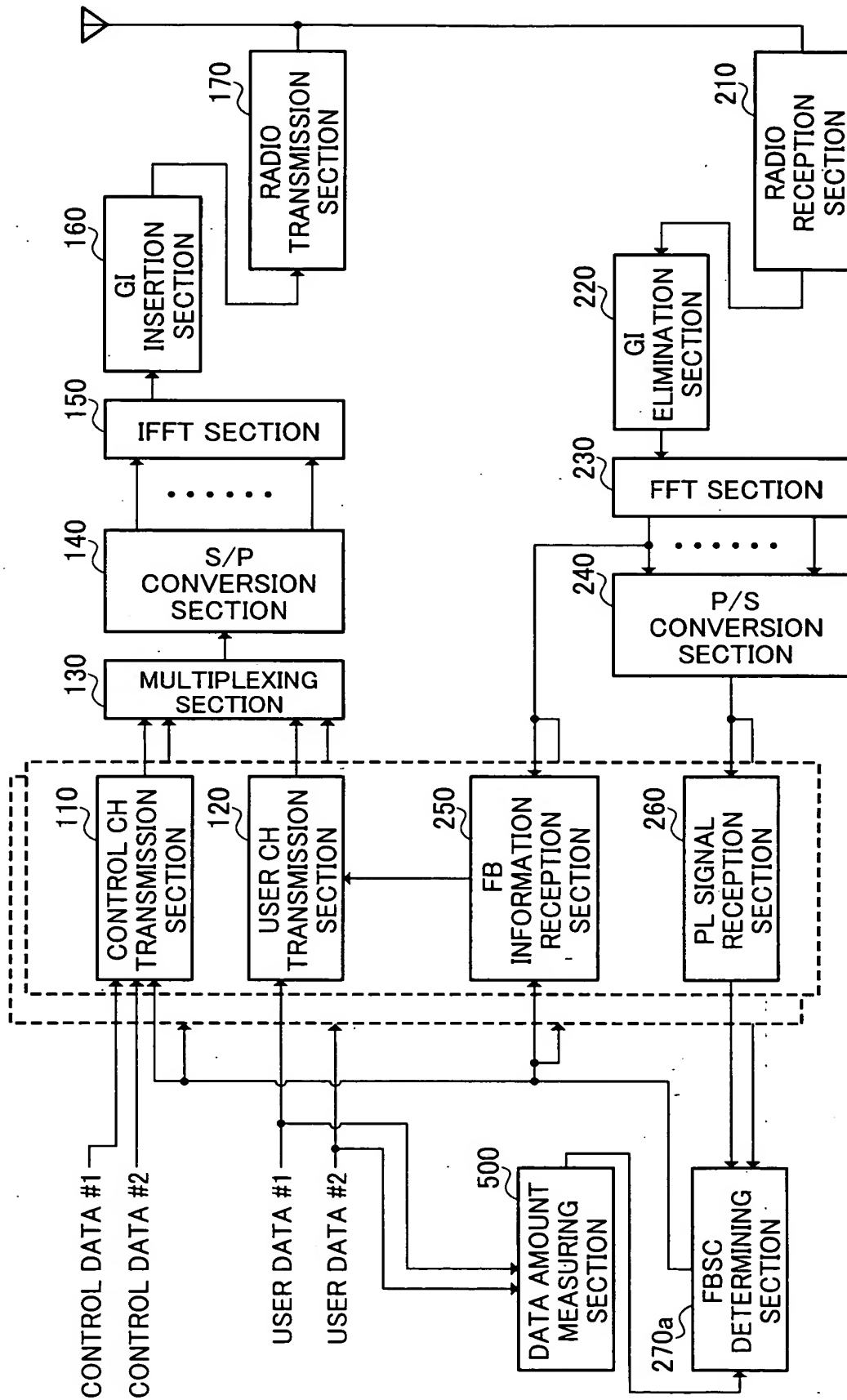


FIG.8

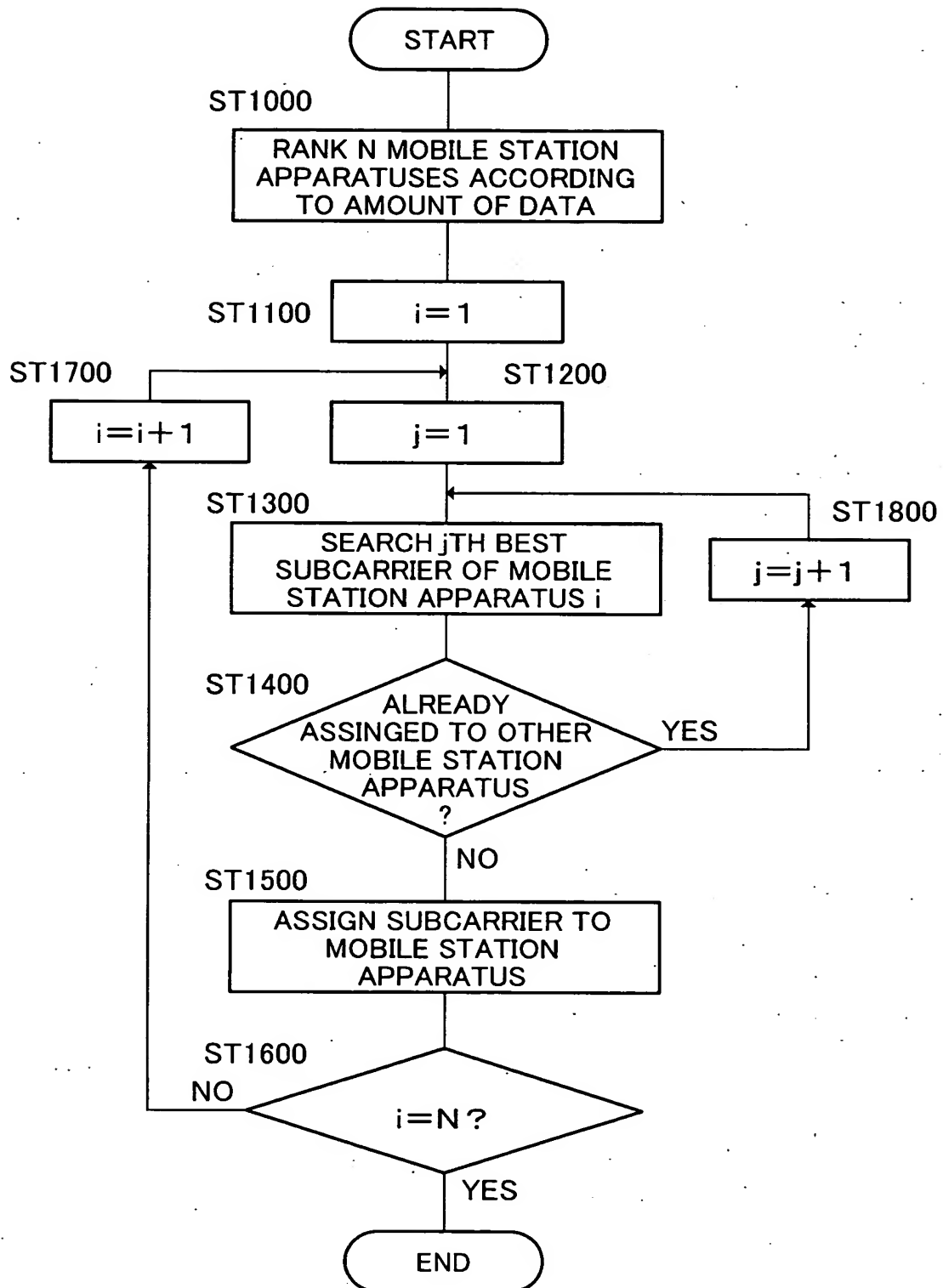


FIG.9

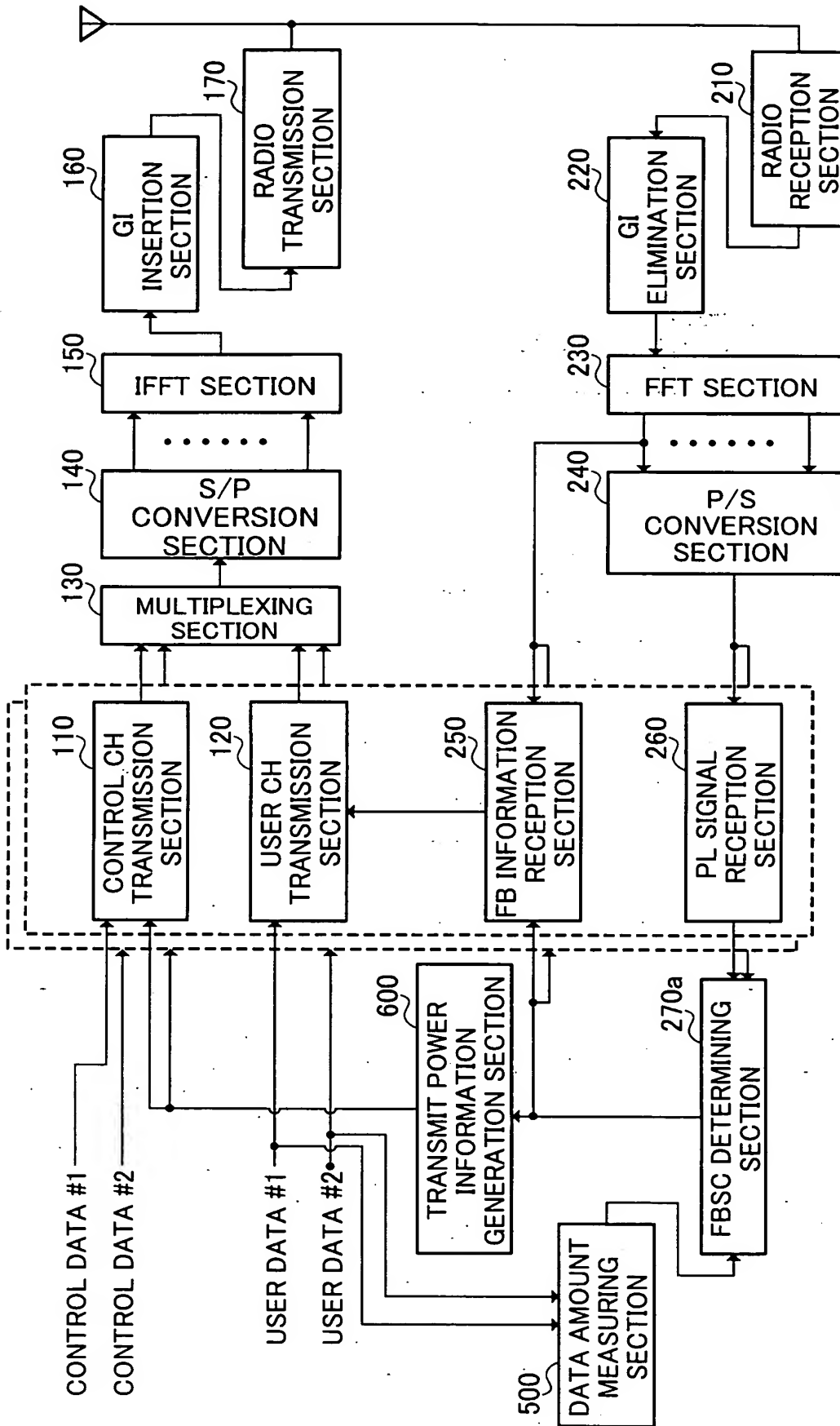


FIG.10

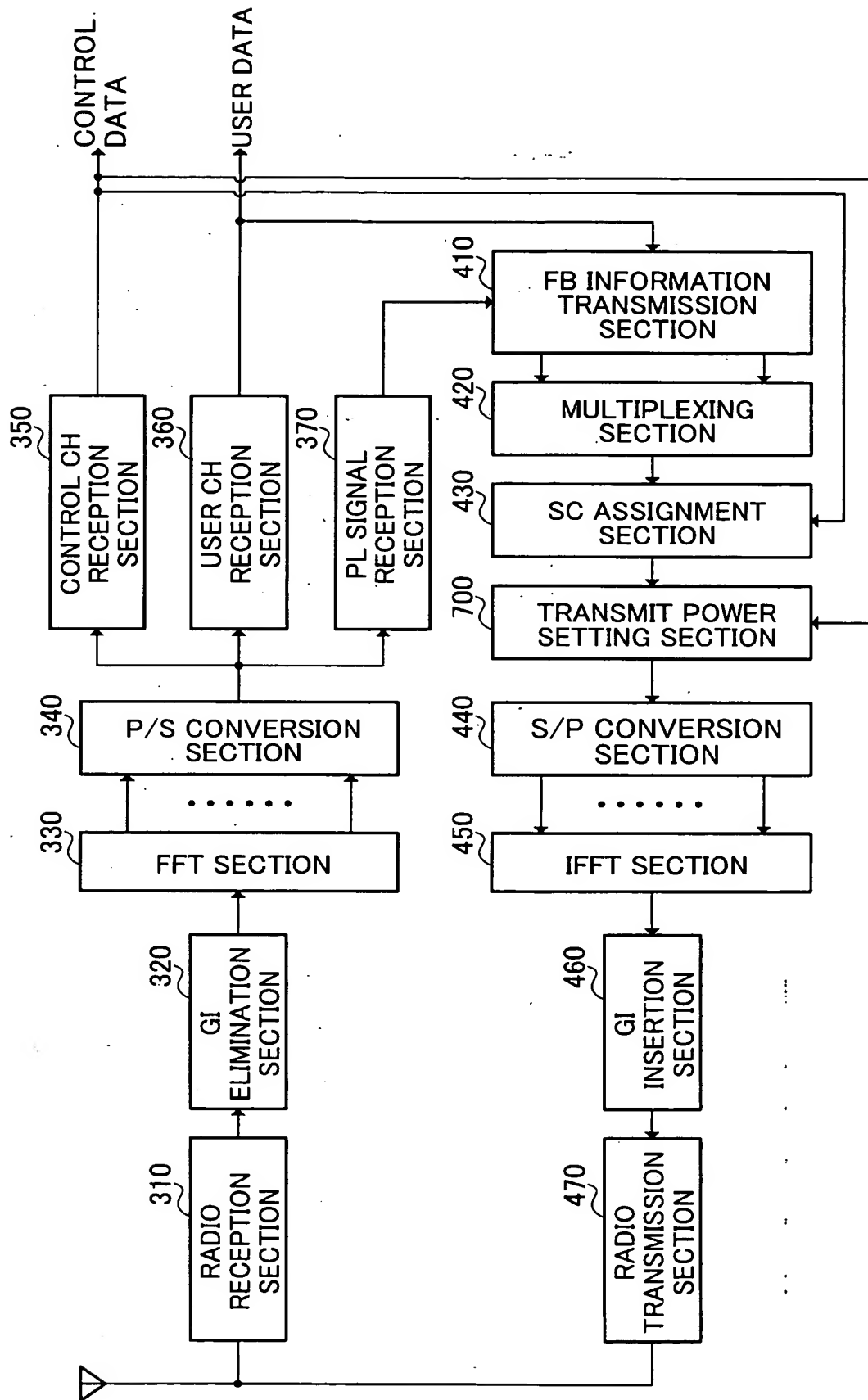


FIG.11

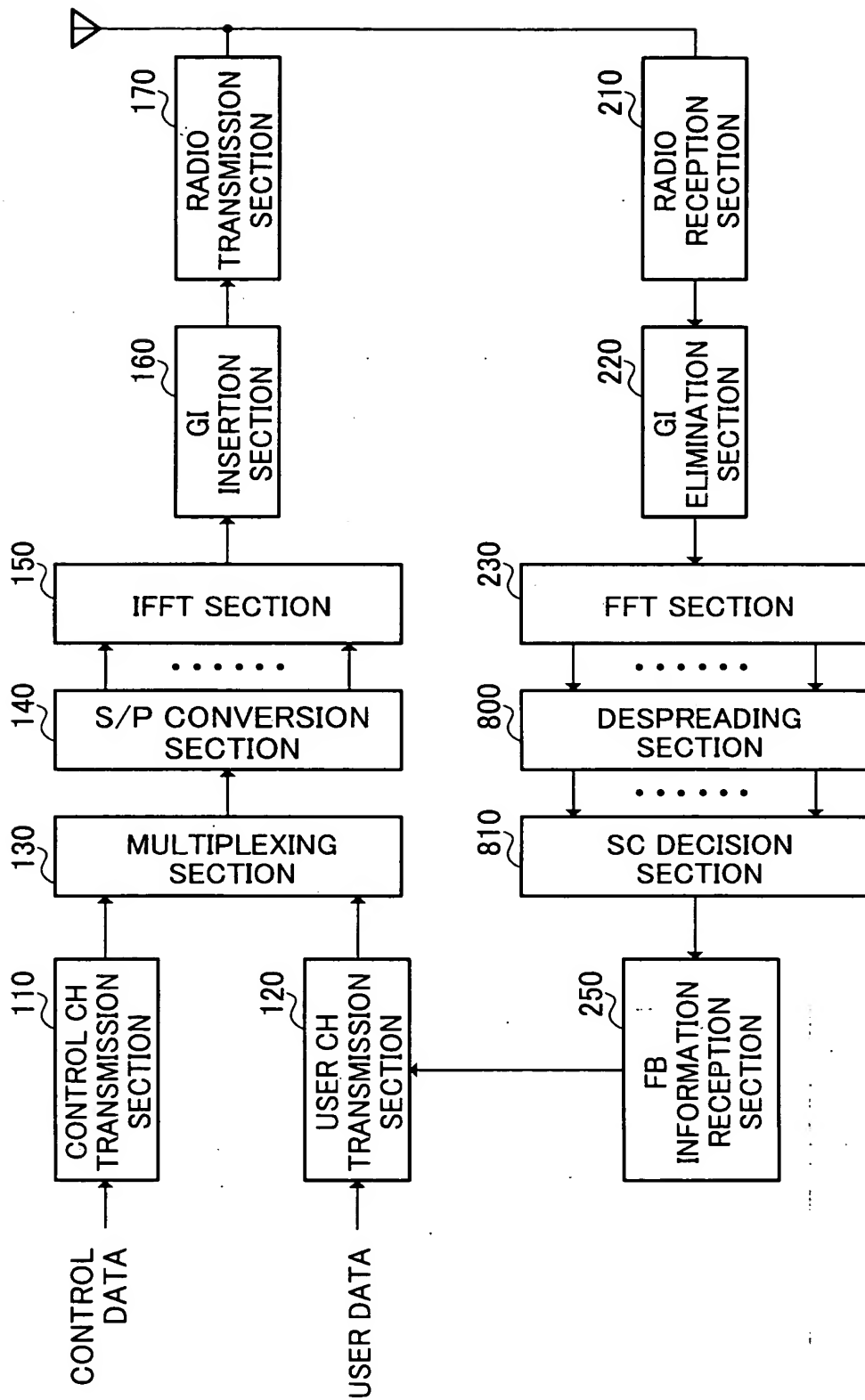


FIG.12

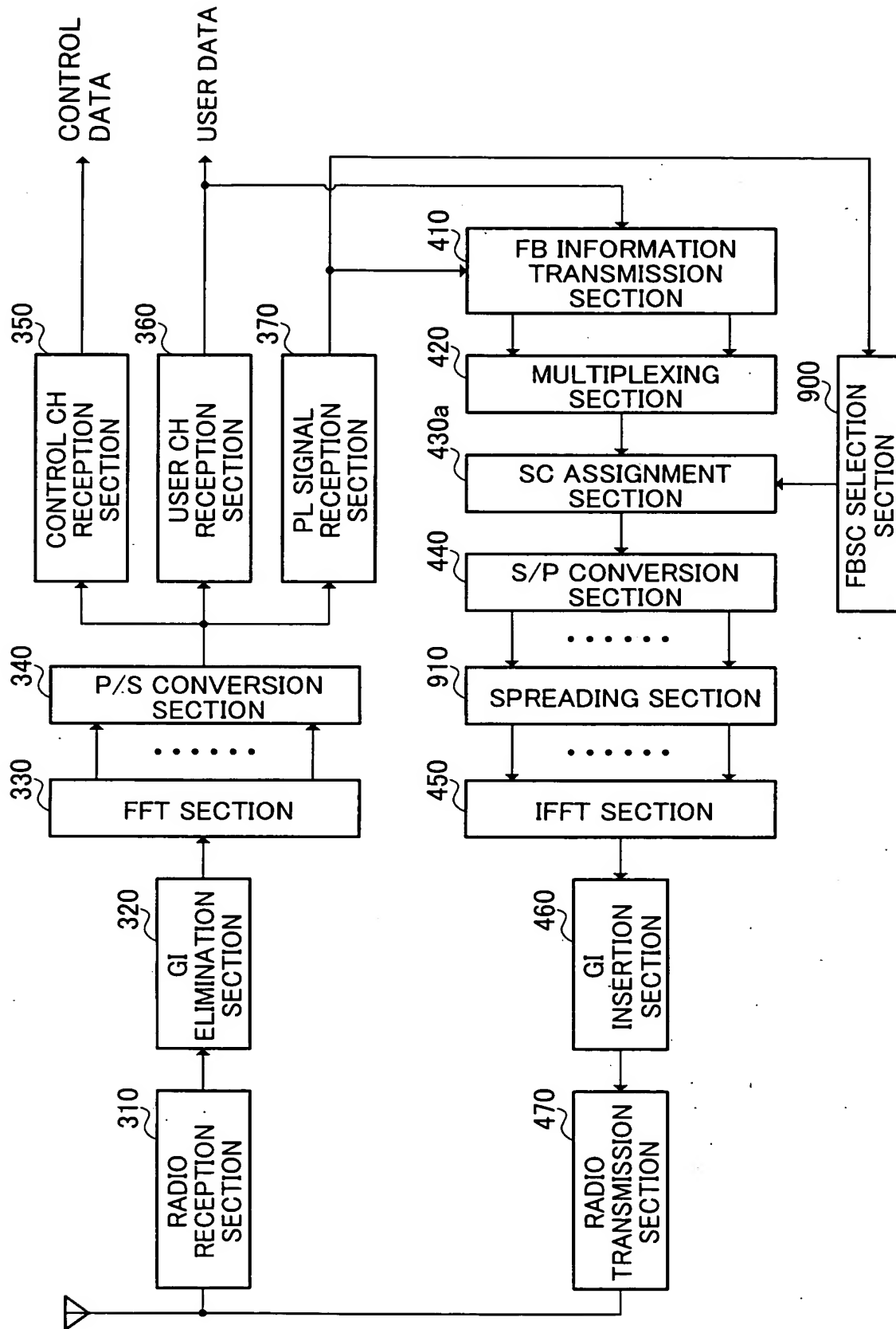


FIG.13